

Longview Fibre Paper & Packaging, Inc. Variance Request Emissions Comparison

Low Furnace Rates

22 Furnace

TBLS/DAY	MLB BLS/HR	lb PM/TBLS	lb TRS/TBLS	lb SO2/TBLS	lb NOX/TBLS	lb CO/TBLS	lb PM/day	lb TRS/day	lb SO2/day	lb NOX/day	lb CO/day	
1,081	90		0.013	0.221	0.822	0.180		14	239	889	195	6
1,204	100	0.008	0.012	0.970	0.911	0.471	9	15	1168	1097	567	7
1,322	110	0.018	0.011	0.742	0.795	0.473	24	14	982	1051	626	8
AVG							16.5	14.5	796.1	1012.5	462.4	
SUM												2302.0

19 Furnace

TBLS/DAY	MLB BLS/HR	lb PM/TBLS	lb TRS/TBLS	lb SO2/TBLS	lb NOX/TBLS	lb CO/TBLS	lb PM/day	lb TRS/day	lb SO2/day	lb NOX/day	lb CO/day	
1,080	90	0.039	0.033	0.326	1.428		42	36	352	1543		9
1,206	101	0.056	0.047	0.172	1.277		68	56	207	1541		10
1,320	110	0.047	0.041	0.223			62	54	294			11
120-130							1.047					1563
AVG							57.2	48.8	284.5	1541.7	1562.5	
SUM												3494.7

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22 Furnace

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	168	0.045					91					
2,039	170		0.011	0.033	0.806	0.668		23	68	1643	1363	12
	176	0.045					95					
2,160	180		0.014	0.033	0.990	0.699		29	72	2140	1510	13
AVG							93	26	70	1891	1436	
SUM												3516.8

#19 low	#22 low	total				lb PM/day	lb TRS/day	lb SO2/day	lb NOX/day	lb CO/day
3494.7	2302.0	5796.7	lb/day		low	73.7	63.3	1080.6	2554.2	2024.9
					high	93	26	70	1891	1436
	#22 high	reduction		% reduction						
	3517	2279.8	lb/day	39.3	red	-19.5	37.2	1010.5	663.0	588.7

KEY

AVG	Average values
SUM	Sum of averages--low rate periods
SUM	Sum of averages--high rate periods
0000	Difficult to estimate due to dynamic readings vs. source test limitations; used annual source tests at 120-130 Mlb BLS/hr rate from 04, 05, 06, 08 & 09.
0000	Data obtained from source test (single or multiple) at specified rate
	Reductions achievable with variance in place.

FOOTNOTES

- 1) As a starting point, interval for CEMS data constrained to 5/1/09 to the present, when 19 Furnace returned to operation at this time after an extended downtime.
- 2) Error found in 19 Furnace stack flow calculation on 8/4/09; all stack flow data prior to this was incorrect (low), therefore, CEMS data for 19 Furnace constrained to dates following.
- 3) Operational setpoint for CO at 22 Furnace changed to 125 ppm corrected on ~12/2/09.
- 4) PM test at 22 Furnace at 100 Mlb BLS/hr on 4/8/04 generated results of 0.2663 lb PM/TBLS (0.0121 gr/dscf corr., or 45% of limit); this is believed to be an anomaly.
- 5) To allow for estimation, source test data for PM, NOX and CO was obtained as far back as 2004.
- 8 hours of data for 90 Mlb BLS/hr at 22 Furnace (5/23/09 19:00 - 5/24/09 02:00)
- 54 hours of data for 100 Mlb BLS/hr at 22 Furnace (for interval 5/2/09 - 12/9/09)
- 412 hours of data for 110 Mlb BLS/hr at 22 Furnace (for interval 5/24/09 - 1/4/10)
- 56 hours of data for 90 Mlb BLS/hr at 19 Furnace (8/11/09 8:00 - 8/12/09 11:00, 8/19/09 8:00 - 22:00, 10/18/09 3:00 - 15:00)
- 219 hours of data for 100 Mlb BLS/hr at 19 Furnace (for interval 8/6/09 - 10/7/09)
- 100 hours of data for 110 Mlb BLS/hr at 19 Furnace (for interval 8/5/09 - 11/29/09)
- 122 hours of data for 170 Mlb BLS/hr at 22 Furnace (for interval 5/2/09 - 1/26/10)
- 156 hours of data for 180 Mlb BLS/hr at 22 Furnace (interval 1/17/10 - 1/26/10)